

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	14	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon) and (deposit\$4 same resist) and (pattern\$4 same resist) and resist\$4 same ("ARC" or (anti near reflective near coat\$4)) and etch\$4 same ("ARC" or (anti near reflective near coat\$4)) and wang.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 15:43
L5	2	"10799146"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/08/26 15:56
L6	4	10/ 799146	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/08/26 15:56
S1	107	((("6635583B2") or ("6624064B1") or ("6573030") or ("6541397B1") or ("6458516B1") or ("6423384B1") or ("6413852") or ("6380106") or ("6358573B1") or ("6333255") or ("6331380B1") or ("6323119B1") or ("6316347") or ("6291334B1") or ("6235629") or ("6214730") or ("6211065B1") or ("6165890") or ("6153935") or ("6143476") or ("6140226") or ("6140224") or ("6098568") or ("6080529") or ("6066577") or ("6064118") or ("6057226") or ("6035803") or ("6030901") or ("6008140") or ("5986344") or ("5900288") or ("5866920") or ("5789320") or ("5759913") or	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/06/30 08:12

		("5461003") or ("6852647") or ("6624064") or ("6596627") or ("6541842") or ("6428894") or ("6358804") or ("6346747") or ("6214637") or ("6203898") or ("6184572") or ("6183930") or ("6054379") or ("5930655") or ("5981000") or ("5882830") or ("5830332") or ("5262262") or ("5022959") or ("5674573") or ("5998100") or ("6352922") or ("6653735") or ("DE10328578") or ("EP381109") or ("EP901156") or ("JP9045633") or ("JP11026578") or ("4975144") or ("6043167") or ("6428894") or ("6884733").FN. or ((2003/0091938A1) or (2002/0090794A1) or (2002/0086547A1) or (2002/0001778A1) or (2001/0007788A1) or (2004/0038537A1) or (2004/0023502) or (2004/0166691A1) or (2004/0180551A1) or (2004/0038537) or (2004/0229470)).CCLS.				
S2	7	S1 and (substrate or wafer or semiconductor) and chamber and (propylene or propyne or propane or butane or butylene or butadiene or acetylene) and argon and plasma and ("RF" or "radio frequency") and (amorphous near4 carbon)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/14 08:22
S3	6	S1 and (substrate or wafer or semiconductor) and chamber and (propylene or propyne or propane or butane or butylene or butadiene or acetylene) and argon and plasma and ("RF" or "radio frequency") and (amorphous near4 carbon) and (hydrogen or oxygen)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/14 08:23

S4	1	Si and (substrate or wafer or semiconductor) and chamber and (propylene or propyne or propane or butane or butylene or butadiene or acetylene) and argon and plasma and ("RF" or "radio frequency") and (amorphous near4 carbon) and (hydrogen or oxygen) and etch\$4 and resist and ("silicon nitride" or "silicon carbide" or "carbon-doped silicon oxide" or "amorphous carbon") and dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/14 08:37
S5	6	(substrate or wafer or semiconductor) and chamber and (propylene or propyne or propane or butane or butylene or butadiene or acetylene) and argon and plasma and ("RF" or "radio frequency") and (amorphous near4 carbon) and (hydrogen or oxygen) and etch\$4 and resist and ("silicon nitride" or "silicon carbide" or "carbon-doped silicon oxide" or "amorphous carbon") and dielectric and "dual frequency"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/16 10:52
S6	2	(substrate or wafer or semiconductor) and chamber and (propylene or propyne or propane or butane or butylene or butadiene or acetylene) and argon and plasma and ("RF" or "radio frequency") and (amorphous near4 carbon) and (hydrogen or oxygen) and etch\$4 and resist and ("silicon nitride" or "silicon carbide" or "carbon-doped silicon oxide" or "amorphous carbon") and dielectric and "dual frequency" and ("ARC" or "anti reflective coating")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/16 08:41
S7	1	10/799146	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/12/16 10:52

S8	5	((substrate or semiconductor or wafer) near8 chamber) and (hydrocarbon near8 gas) and argon and plasma and (dual near4 frequency) and (amorphous near4 carbon) and hydrogen and (dielectric or oxide or insulat\$4) and etch\$3 and silicon and oxygen	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/30 08:25
S9	4	((substrate or semiconductor or wafer) near8 chamber) and (hydrocarbon near8 gas) and argon and plasma and (dual near4 frequency) and (amorphous near4 carbon) and hydrogen and (dielectric or oxide or insulat\$4) and etch\$3 and silicon and oxygen and (conduct\$4 or metal or polysilicon) and pattern	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/30 08:26
S10	25	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch\$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern same resist)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/02/27 20:51

S11	1	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch \$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern same resist) and (257/437. ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/02/27 21:20
S12	1	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch \$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern same resist) and (257/437. ccls.) and hydrocarbon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/02/28 17:20
S13	21	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch \$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/02 11:43

		same resist) and argon				
S14	14	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch \$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern same resist) and (argon same hydrocarbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/02 11:44
S15	10	(chamber same (substrate or carrier or base or plate or wafer)) and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (process\$4 same gas) and plasma and rf near (power or source) and (etch \$4 or remov\$4 or photolithograph\$8) same carbon and (etch\$4 same remov\$4) same(ARC or (ar near coat\$4) or (anti adj reflective)) and (pattern same resist) and (argon same hydrocarbon) same process\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/02 11:44
S16	171	(argon same hydrocarbon) same (amorphous near carbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/02 11:49
S17	14	(argon same hydrocarbon) same (amorphous near carbon) same (process\$4 near gas)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/02 11:50

S18	2081	438/778.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:13
S19	1047	438/778.ccls. and (substrate or wafer or carrier or base or plate) same chamber	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:14
S20	980	438/778.ccls. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:15
S21	10	438/778.ccls. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrocarbon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:16
S22	12	438/778.ccls. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:16
S23	12	438/778.ccls. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:16

S24	9	438/ 778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:17
S25	5	438/ 778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:17
S26	4	438/ 778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat \$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:18



S27	3	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:18
S28	3	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:19
S29	3	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:19

		(anti near reflective) and resist				
S30	2	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective) same resist	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:19
S31	2	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective or "ARC") same resist	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:19
S32	2	438/778.cds. and (substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:20

		and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective or "ARC") same resist and etch \$4 same (anti near reflective or "ARC")				
S33	41	(substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective or "ARC") same resist and etch \$4 same (anti near reflective or "ARC")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/20 11:24
S34	1338	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 09:19
S35	279	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 09:20
S36	69	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon) and (deposit\$4 same resist) and (pattern\$4 same resist)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 09:21

S37	61	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon) and (deposit\$4 same resist) and (pattern\$4 same resist) and resist\$4 same ("ARC" or (anti near reflective near coat\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 09:22
S38	60	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon) and (deposit\$4 same resist) and (pattern\$4 same resist) and resist\$4 same ("ARC" or (anti near reflective near coat\$4)) and etch\$4 same ("ARC" or (anti near reflective near coat\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/08/26 09:22

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	16	(etch\$4 same (dielectric or oxide or insulat\$4)) same (amorphous near carbon) and ("ARC" or (anti near reflective near coat\$4)) same (amorphous near carbon) and (deposit\$4 same resist) and (pattern\$4 same resist) and resist\$4 same ("ARC" or (anti near reflective near coat\$4)) and etch\$4 same ("ARC" or (anti near reflective near coat\$4)) .dlm.	US-PGPUB; USPAT	OR	ON	2009/08/26 15:51

L3	9	(substrate or wafer or carrier or base or plate) same chamber and (dielectric or oxide or insulat\$4) same (substrate or wafer or carrier or base or plate) and (amorphous near carbon) same hydrogen and (amorphous near carbon) same carbon and (gas same hydrocarbon) and argon and (etch\$4 or pattern\$4) same (amorphous near carbon) and (etch\$4 or pattern\$4) same (dielectric or oxide or insulat\$4) and (anti near reflective or "ARC") same resist and etch\$4 same (anti near reflective or "ARC"). clm.	US-PGPUB; USPAT	OR	ON	2009/08/26 15:51
L4	2	"10799146"	US-PGPUB; USPAT	OR	ON	2009/08/26 15:55

8/ 26/ 09 4:01:21 PM

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